

REMARKS

Claims 1-83 are currently pending in the application. Claims 1, 7-9, 12, 14, 17, 19-22, 25, 32, 37 and 39-81 have been amended herein. No new matter has been added.

Summary of Claim Objections and Rejections

In the Office Action, independent claims 1, 39 and 77 were objected to as containing language informalities. More specifically, the Examiner suggested the claims were inaccurate syntactic/semantic constructs and not easily interpretable.

Claim 8 was objected to as containing a typographical error.

Claims 2, 3 and 38 were objected to as containing syntactic improprieties.

In the Office Action, claims 1-83 were rejected under 35 USC §103(a) as being unpatentable over *The MathWorks “Simulink: Model-based and System-based Design,” Using Simulink*, Version 5, copyright 1990-2002, last printed July 2002, chapters 2 through 11, 13 and 14 (hereafter “Simulink5”) in view of Chandhoke et al., United States Published Application No. 2003/0144751 (hereafter “Chandhoke”). Applicants respectfully traverse this rejection.

Claim Objections

The Examiner objected to the use of the term ‘dynamically updated execution list’ in the claims as describing (i) depicting an execution order of a plurality of methods called during execution of a time step of the model; and (ii) to list methods that have been called during the time step until a specified point (see Office Action page 2, paragraph 2). The Examiner opined that since the term “execution order” was also used in the specification to discuss the execution order of blocks, the claim phrase ‘dynamically updated execution list’ read on both the execution order of blocks and the listing of methods during a time step, and the claimed phrase was therefore improper for being not easily interpretable.

While not agreeing with the Examiner, Applicants have amended independent claims 1, 39 and 77 herein and respectfully urge that the new claims render the objection moot. Claims 1 and 39 now recite in part:

...displaying an execution list view depicting a listing of a plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step, the execution list view being updated during a simulation of the model...

Similarly, claim 77 recites in part:

...an execution list view, the execution list view depicting a listing of a plurality of methods called during the execution of a time step of the model until a specified point in execution of the time step, a state of at least one method depicted in the execution list view being visually represented on the model view.

Claims 1, 39 and 77 no longer include the phrase “execution order” which the Examiner indicated was responsible for adding ambiguity to the earlier versions of claims 1, 39 and 77. Accordingly, reconsideration and allowance of claims 1, 39 and 77 is requested.

The typographical error noted by the Examiner in claim 8 has been corrected. The grammatical inconsistency noted by the Examiner in claim 38 has also been addressed. Applicants respectfully urge that the ‘-’ symbol in claims 2 and 3 in the last Amendment that was noted by the Examiner was actually a track change mark indicating the removal of whitespace and the acceptance of that Amendment removed the mark in question. Accordingly, reconsideration and allowance of claims 2, 3, 8 and 38 is requested.

Claim Rejections under 35 USC §103(a)

Claim 1

Claim 1 recites:

In a graphical modeling and execution environment, a method comprising:

- displaying a model view of a model being executed, the model view graphically depicting a plurality of components of the model;
- displaying an execution list view depicting a listing of a plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step, the execution list view being updated during a simulation of the model;**
- and
- indicating visually on the model view a state of at least one method depicted in the updated execution list view at the specified point in the time step.**

Applicants respectfully urge that Simulink5 and Chandhoke, taken either singly or in any reasonable combination fail to disclose or suggest at least **displaying an execution list view depicting a listing of a plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step** which is present in claim 1.

Applicants also respectfully urge that Simulink5 and Chandhoke taken either singly or in any reasonable combination, also fail to disclose or suggest at least **the execution list view being updated during a simulation of the model, and indicating visually on the model view a state of at least one method depicted in the updated execution list view at the specified point in the time step**, which are present in claim 1.

With regards to displaying an execution list view depicting a listing of a plurality of methods **called during an execution of a time step** of the model until a specified point in execution of the time step, Simulink5 fails to disclose or suggest such an execution list view.

In the Office Action, the Examiner cited sections relating to the execution order of blocks on pages 2-10, 2-11, 2-19, 2-20, 5-16, 5-17 and page 10-40 in the Simulink5 reference as inherently disclosing an execution list of methods called during a time step. See Office Action, paragraph 6. The sections cited by the Examiner discuss various elements of the SIMULINK® software. Specifically, pages 2-10 and 2-11 discuss processing that occurs at each time step. Pages 2-19 and 2-20 discuss algebraic loops. Pages 5-16 and 5-17 discuss controlling an execution order of **blocks** that occurs on the basis of execution priorities and displaying the **block** execution order. Page 10-40 discusses possible causes of slow simulations. None of the pages cited by the Examiner discuss displaying an execution list view depicting **a listing of a**

plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step. At best, in the cited pages, Simulink5 describes displaying results using a display block and displaying **a block execution order**. See Simulink5, pp. 2-10 and 5-17. However, Simulink5 provides no disclosure or suggestion that the displayed results or block execution order includes a list of **methods** called, or a list that depicts an execution order of **methods** called **during/within** a time step up until a specified point in the time step.

Chandhoke describes a system for previewing a sequence of motion control operations controlled by a user through a graphical user interface (GUI) (see Chandhoke, Abstract, Figure 5 and pages 9-11). The displayed operations are updated based on user input. The Examiner cited Chandhoke as describing representing an evolution of blocks being simulated with a stepping paradigm and for providing a dynamic redisplay of the state of the blocks based on user input (see Office Action page 6). However, Chandhoke fails to address the deficiencies of Simulink5 in failing to disclose or suggest **displaying an execution list view depicting a listing of a plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step**, which is present in Applicants' claim 1.

Regarding the Applicants' claimed **the execution list view being updated during a simulation of the model**, as noted above, since neither Simulink5 nor Chandhoke disclose **an execution list depicting an execution order of a plurality of methods called during a time step**, these references fail to disclose **the execution list view being updated during a simulation of the model**. In the Office Action, the Examiner admits that Simulink5 fails to show that the execution list is dynamically updated during the execution of the model but suggests that Simulink5 could be combined with Chandhoke to teach this feature (see Office Action page 6 and 7). Applicant respectfully submits that this argument ignores the fact that neither of the cited references shows an execution list view displaying **a list of methods called during an execution of a time step** until a specified point in the execution of the time step as claimed by Applicants. Since neither reference discloses or suggests the underlying execution list, the combination of references certainly does not teach the claimed updating of the execution list view.

Regarding the Applicants' claimed **indicating visually on the model view a state of at least one method depicted in the updated execution list view at the specified point in the time step**, Applicants respectfully urge that the above arguments are also applicable to this claim feature. Neither Simulink5 or Chandhoke disclose or suggest the claimed execution list view and so clearly do not disclose or suggest the visual indication on the model view of the state of a method depicted in the execution list view.

For reasons set forth above, Applicants respectfully request that the above rejection of claim 1 be withdrawn.

Claims 2-38

Claims 2-38 depend from independent claim 1 and, as such, incorporate all of the features of claim 1. Accordingly, claims 2-38 are allowable for at least the reasons set forth above with respect to claim 1. Applicants therefore respectfully request reconsideration and allowance of claims 2-38.

Claim 39

Independent claim 39 is a computer-readable media claim corresponding to claim 1. Accordingly, for the reasons set forth above in the discussion of claim 1, Applicants respectfully urge that Simulink5 and Chandhoke, taken either singly or in any reasonable combination fail to disclose or suggest at least **displaying an execution list view depicting a listing of a plurality of methods called during an execution of a time step of the model until a specified point in execution of the time step** which is present in claim 39. Applicants also respectfully urge that Simulink5 and Chandhoke taken either singly or in any reasonable combination, also fail to disclose or suggest at least **the execution list view being updated during a simulation of the model, and indicating visually on the model view a state of at least one method depicted in the updated execution list view at the specified point in the time step**, which are present in claim 39.

Therefore, Applicants respectfully request that the above rejection of claim 39 be withdrawn.

Claims 40-76

Claims 40-76 depend from independent claim 39 and, as such, incorporate all of the features of claim 39. Accordingly, claims 40-76 are allowable for at least the reasons set forth above with respect to claim 39. Applicants therefore respectfully request reconsideration and allowance of claims 40-76.

Claim 77

Applicants' claim 77 includes:

...an execution list view, the execution list view depicting a listing of a plurality of methods called during the execution of a time step of the model until a specified point in execution of the time step, a state of at least one method depicted in the execution list view being visually represented on the model view.

Independent claim 77 includes *the execution list view depicting a listing of a plurality of methods called during the execution of a time step of the model until a specified point in execution of the time step, a state of at least one method depicted in the execution list view being visually represented on the model view*. As noted above, Simulink5 and Chandhoke, taken either singly or in any reasonable combination, fail to disclose or suggest at least *the execution list view depicting a listing of a plurality of methods called during the execution of a time step of the model until a specified point in execution of the time step*. As noted previously, since the cited references fail to disclose or suggest the claimed execution list view, the references therefore also fail to disclose or suggest *a state of at least one method depicted in the execution list view being visually represented on the model view*. Accordingly, Applicants respectfully request that the above rejection of claim 77 be withdrawn.

Claims 78-83

Claims 78-83 depend from independent claim 77 and, as such, incorporate all of the features of claim 77. Accordingly, claims 78-83 are allowable for at least the reasons set forth

above with respect to claim 77. Applicants therefore respectfully request reconsideration and allowance of claims 78-83.

CONCLUSION

In view of the above Amendment, Applicants believe all of the claims in the pending application are in condition for allowance. Should the Examiner feel that a teleconference would expedite the prosecution of this application, the Examiner is urged to contact the Applicants' attorney at (617) 227-7400.

Please charge any shortage or credit any overpayment of fees to our Deposit Account No. 12-0080, under Order No. MWS-087RCE. In the event that a petition for an extension of time is required to be submitted herewith, and the requisite petition does not accompany this response, the undersigned hereby petitions under 37 C.F.R. § 1.136(a) for an extension of time for as many months as are required to render this submission timely. Any fee due is authorized to be charged to the aforementioned Deposit Account.

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Respectfully submitted,

Electronic signature: /John S. Curran/
John S. Curran
Registration No.: 50,445
LAHIVE & COCKFIELD, LLP
One Post Office Square
Boston, Massachusetts 02109-2127
(617) 227-7400
(617) 742-4214 (Fax)
Attorney/Agent For Applicant